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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,760	02/08/2002	Cornelius Peter	TRW(AEC)6035	2939

7590 04/11/2003

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EXAMINER

KRAMER, DEVON C

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 04/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/072,760

Applicant(s)

PETER, CORNELIUS

Examiner

Devon C Kramer

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s).
- 5) ☐ Notice of Informal Patent Application (PTO-1447)
- 6) ☐ Other: .

CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER

**DETAILED ACTION**

***Specification***

- 1) The disclosure is objected to because of the following informalities:

Page 5 line 2, "pullea" should be --pulley--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

- 2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3) Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the output" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the rotor" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "reduction gear" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

- 4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) Claims 1, 4-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Belmond (EP 0936112).

In reference to claim 1, Belmond provides a park brake system for vehicles comprising: an actuator (2) with an electric drive motor and an electronic control unit (inherent to control the electrical components of the motor), a reduction gear having an input connected to the output of the electric motor and a pull force output member (5) for connection to mechanical brakes of the vehicle, and to a command unit (operator actuator mechanism) connected to said electronic control unit; wherein said reduction gear comprises a first reduction train and a second reduction train, the first reduction train including a worm gear (at end of motor shaft) and the second reduction train including a threaded spindle (4) and a screw nut (7) engaged with said spindle, said worm gear connecting said spindle to the output of said electric motor, and said pull force output member being connected to the screw nut.

In reference to claim 4, Belmond provides a park brake system for vehicles comprising wherein the pull force output member is a pivotally (11) mounted two-armed lever having a first arm (24) connected to said screw nut and a second arm (14, 15) adapted for connection to a brake cable.

In reference to claim 5, Belmond provides a park brake system wherein said electric drive motor inherently is a high torque brushless DC motor. This is inherent because it is used in a vehicle and the high torque is needed to actuate the brake.

In reference to claim 6, Belmond provides a park brake system comprising a common carrier (12) with a base wall mounting said drive motor and said spindle.

In reference to claim 7, Belmond provides a park brake system wherein said base wall is integrally molded with a tubular mounting structure for said spindle and for said screw nut (figure 7).

In reference to claim 8, Belmond provides a park brake system comprising wherein said base wall is integrally molded with a tubular mounting structure for a rotor of said electric drive motor (figure 7).

In reference to claim 10, Belmond provides a park brake system wherein said electric drive motor has an outer rotor and a removable cover (9) is fitted over said rotor.

#### ***Allowable Subject Matter***

6) Claims 2-3, 9 and 11-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gill et al, Carlson et al, Matsuo et al, Yanaka et al, Sugimoto et al, Guitierrez et al, Miyakawa et al, Taniguchi, Gibson, Peter, Belmond (5590744), Hanson, and Hess all provide electric parking brake mechanisms.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3519 for regular communications and 703-308-3519 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK  
April 4, 2003

CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER

